

REMARKS

In the Office Action mailed April 3, 2006, the Examiner took the following action: (1) rejected claims 1, 7, 10-11, 13, 17-19 and 24 under 35 U.S.C. §102(b) as being anticipated by Goolcharan (U.S. 6,064,422); and (2) rejected claims 2-6, 8-9, 12, 14-16, 20 and 22-23 under 35 U.S.C. §103(a) as being unpatentable over Goolcharan. Applicant respectfully requests reconsideration of the application in view of the foregoing amendments and the following remarks.

I. Rejections under 35 U.S.C. §102(b) and 35 U.S.C. §103(a)

Claims 1, 7, 10-11, 13, 17-19 and 24 stand rejected under 35 U.S.C. §102(b) as being anticipated by Goolcharan (U.S. 6,064,422), and claims 2-6, 8-9, 12, 14-16, 20 and 22-23 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Goolcharan.

Claims 1-6

As amended, claim 1 recites:

1. A device for switching between a plurality of video inputs and a plurality of video outputs, the device comprising:
an interface device coupled to a data bus; and
a switch coupled to the interface device and a plurality of video inputs and outputs, *the switch including a control logic component operatively coupled to a video crosspoint switch that is, in turn, coupled to the plurality of video inputs and the plurality of video outputs, and*
wherein when a video switching signal is received by the interface device over the data bus, the interface device transmits the video switching signal to the control logic component, *the control logic component being configured to interpret the video switching signal, to generate a video switch instruction based on the received video switching signal, and to send the generated video switch instruction to the video crosspoint switch, the video crosspoint switch being configured to connect one or more of the video inputs to one or more of the video outputs according to the video switch instruction.* (emphasis added).

Goolcharan (U.S. 6,064,422)

Goolcharan teaches a communication system which allows video transmissions over telephone wires. (1:10-14). According to Goolcharan, as best shown in Figures 1 and 2, a plurality of subscribers (S1A-S1P) are coupled to a first video server VS1 by telephone lines, and a plurality of remote subscribers (S2A-S2P) are coupled to a second video server VS2 by telephone lines. (6:4-7; 6:24-26). The first and second video servers VS1, VS2 are coupled by a commercial telephone infrastructure system. (6:15-27). Each video server VS1, VS2 includes a 16 by sixteen cross-matrix video switching system 10 as shown in Figure 2 (6:9-11), which further includes a cross-matrix switch 11 made up of four eight by eight one-way, single ended cross-matrix switches coupled in parallel, two forward and two reversed, as shown in Figures 3A-3D. (8:14-16). Each of inputs of the eight by eight one-way, single ended cross-matrix switches is coupled to a compensating circuit chip U12 which, in turn, is coupled to a switching chip MAX456SO by a corresponding switching chip circuit U1, U1A, etc. (9:28-38).

Goolcharan fails to disclose, teach, or fairly suggest the device recited in claim 1. More specifically, Goolcharan fails to teach or fairly suggest a device for switching that includes a switch including a control logic component operatively coupled to a video crosspoint switch that is, in turn, coupled to the plurality of video inputs and the plurality of video outputs, and wherein the control logic component being configured to interpret the video switching signal, to generate a video switch instruction based on the received video switching signal, and to send the generated video switch instruction to the video crosspoint switch, the video crosspoint switch being configured to connect one or more of the video inputs to one or more of the video outputs according to the video switch instruction. (emphasis added).

According to Goolcharan, each cross-matrix switch 11 includes four eight by eight one-way, single ended cross-matrix switches coupled in parallel, two forward and two reversed, (Figures 3A-3D; 8:14-16), and each input is coupled to a compensating circuit chip U12 which, in turn, is coupled to a switching chip MAX456SO, (9:28-38). There is no teaching or suggestion in Goolcharan of a *switch including a control logic component operatively coupled to a video crosspoint switch that is, in turn, coupled to the plurality of video inputs and the plurality of video outputs, and wherein the control logic component being configured to interpret the video switching signal, to generate a video switch instruction based on the received video switching signal, and to send the generated video switch instruction to the video crosspoint switch, the video crosspoint switch being configured to connect one or more of the video inputs to one or more of the video outputs according to the video switch instruction* as recited in Applicant's claim 1 (emphasis added). Accordingly, claim 1 is allowable over Goolcharan.

Claims 2-6 depend from claim 1 and are allowable over Goolcharan at least due to their dependency on claim 1, and also due to additional limitations recited in those claims. For example, claim 6 recites the device of Claim 1, *wherein the control logic component includes a local bus control logic component configured to receive and interpret control signals from the interface device; a command word buffer coupled to the local bus control logic component and configured to receive and buffer command words from the interface device, and local commands from the local bus control logic component; and a switch control state machine coupled to the command word buffer and configured to receive command words from the command word buffer and to condition the command words into an output signal suitable for input to the video crosspoint switch.* (emphasis added). These additional limitations are also not taught or fairly suggested by Goolcharan.

Claims 7-9

Similarly, amended claim 7 recites:

7. A method for switching between a plurality of video inputs and a plurality of video outputs, the method comprising:
receiving a video switching signal at an interface device of a switch device;
generating a video instruction at the interface device based on the received video switching signal;
sending the generated video instruction to a switch, *the switch including a control logic component operatively coupled to a video crosspoint switch that is, in turn, coupled to the plurality of video inputs and the plurality of video outputs, the control logic component receiving and interpreting the video instruction and outputting a video switch instruction to the video crosspoint switch based on the received video instruction*; and
connecting one or more of the video inputs to one or more of the video outputs according to the video switch instruction *using the video crosspoint switch*. (emphasis added).

Goolcharan fails to disclose, teach, or fairly suggest the method recited in claim 7. More specifically, Goolcharan fails to teach or fairly suggest a method of switching that includes sending the generated video instruction to a switch, *the switch including a control logic component operatively coupled to a video crosspoint switch that is, in turn, coupled to the plurality of video inputs and the plurality of video outputs, the control logic component receiving and interpreting the video instruction and outputting a video switch instruction to the video crosspoint switch based on the received video instruction*; and connecting one or more of the video inputs to one or more of the video outputs according to the video switch instruction *using the video crosspoint switch*. (emphasis added).

As noted above, according to Goolcharan, each cross-matrix switch 11 includes four eight by eight one-way, single ended cross-matrix switches coupled in parallel, two forward and two reversed, (Figures 3A-3D; 8:14-16), and each input is coupled to a compensating circuit chip U12 which, in turn, is coupled to a switching chip MAX456SO, (9:28-38). There is no teaching or suggestion in Goolcharan of sending the generated video instruction to a switch, *the switch*

including a control logic component operatively coupled to a video crosspoint switch that is, in turn, coupled to the plurality of video inputs and the plurality of video outputs, and and connecting one or more of the video inputs to one or more of the video outputs according to the video switch instruction using the video crosspoint switch as recited in Applicant's claim 7 (emphasis added). Accordingly, claim 7 is allowable over Goolcharan.

Claims 8-9 depend from claim 7 and are allowable over Goolcharan at least due to their dependency on claim 7, and also due to additional limitations recited in those claims. For example, claim 9 recites the method of Claim 7, wherein sending the generated video instruction to a switch including a control logic component includes sending the generated video instruction *to a switch including a control logic component having: a local bus control logic component configured to receive and interpret control signals from the interface device; a command word buffer coupled to the local bus control logic component and configured to receive and buffer command words from the interface device, and local commands from the local bus control logic component; and a switch control state machine coupled to the command word buffer and configured to receive command words from the command word buffer and to condition the command words into an output signal suitable for input to the video crosspoint switch.* (emphasis added). These additional limitations are also not taught or fairly suggested by Goolcharan.

Claims 10-17

Similarly, claim 10 recites:

10. A video system comprising:
a video box comprising:
a video controller; and
*a video switch including a control logic component operatively coupled to
a video crosspoint switch;*
one or more user interfaces coupled to the video controller;
a plurality of video inputs coupled to the video crosspoint switch; and
a plurality of video outputs coupled to the video crosspoint switch,

wherein activation of the user interface generates a video control signal and sends the generated video control signal to the video controller, the video controller generates a video switching signal based on the received video control signal and *transmits the video switching signal to the control logic component, the control logic component being configured to interpret the video switching signal, to send a video switch instruction to the video crosspoint switch, and the video crosspoint switch being configured to connect one or more of the plurality of video inputs to one or more of the plurality of video outputs based on the generated video switch instruction.* (emphasis added)

Goolcharan fails to disclose, teach, or fairly suggest the system recited in claim 11. More specifically, Goolcharan fails to teach or fairly suggest a system that includes *a video switch including a control logic component operatively coupled to a video crosspoint switch, and wherein activation of the user interface generates a video control signal and sends the generated video control signal to the video controller, the video controller generates a video switching signal based on the received video control signal and transmits the video switching signal to the control logic component, the control logic component being configured to interpret the video switching signal, to send a video switch instruction to the video crosspoint switch, and the video crosspoint switch being configured to connect one or more of the plurality of video inputs to one or more of the plurality of video outputs based on the generated video switch instruction.* (emphasis added).

As described above, according to Goolcharan, each cross-matrix switch 11 includes four eight by eight one-way, single ended cross-matrix switches coupled in parallel, two forward and two reversed, (Figures 3A-3D; 8:14-16), and each input is coupled to a compensating circuit chip U12 which, in turn, is coupled to a switching chip MAX456SO, (9:28-38). There is no teaching or suggestion in Goolcharan of *a video switch including a control logic component operatively coupled to a video crosspoint switch*, and wherein activation of the user interface generates a video control signal and sends the generated video control signal to the video controller, the

video controller generates a video switching signal based on the received video control signal and *transmits the video switching signal to the control logic component, the control logic component being configured to interpret the video switching signal, to send a video switch instruction to the video crosspoint switch, and the video crosspoint switch being configured to connect one or more of the plurality of video inputs to one or more of the plurality of video outputs based on the generated video switch instruction* as recited in Applicant's claim 10 (emphasis added). Accordingly, claim 10 is allowable over Goolcharan.

Claims 11-17 depend from claim 10 and are allowable over Goolcharan at least due to their dependencies on claim 10, and also due to additional limitations recited in those claims. For example, claim 16 recites the system of Claim 10, *wherein the control logic component includes a local bus control logic component configured to receive and interpret control signals from the interface device; a command word buffer coupled to the local bus control logic component and configured to receive and buffer command words from the interface device, and local commands from the local bus control logic component; and a switch control state machine coupled to the command word buffer and configured to receive command words from the command word buffer and to condition the command words into an output signal suitable for input to the video crosspoint switch.* (emphasis added). These additional limitations are also not taught or fairly suggested by Goolcharan.

Claims 18-24

Claim 18 recites:

18. A method comprising:

- generating a video control signal at a user interface;
- sending the generated video control signal to a video controller;
- generating a video switching signal based on the received video control signal the video controller;
- sending the generated video switching signal to a video switch, *the video switch including a control logic component operatively coupled to a video crosspoint switch that is, in turn, coupled to the plurality of*

video inputs and the plurality of video outputs, the control logic component receiving and interpreting the video instruction and outputting a video switch instruction to the video crosspoint switch based on the received video instruction; and
connecting one or more of a plurality of video inputs to one or more of a plurality of video outputs at the video switch based on the generated video switching signal *using the video crosspoint switch.* (emphasis added).

Goolcharan fails to disclose, teach, or fairly suggest the method recited in claim 18. More specifically, Goolcharan fails to teach or fairly suggest a method of switching that includes sending the generated video instruction to a switch, *the switch including a control logic component operatively coupled to a video crosspoint switch that is, in turn, coupled to the plurality of video inputs and the plurality of video outputs, the control logic component receiving and interpreting the video instruction and outputting a video switch instruction to the video crosspoint switch based on the received video instruction; and* connecting one or more of the video inputs to one or more of the video outputs according to the video switch instruction *using the video crosspoint switch.* (emphasis added).

As noted above, according to Goolcharan, each cross-matrix switch 11 includes four eight by eight one-way, single ended cross-matrix switches coupled in parallel, two forward and two reversed, (Figures 3A-3D; 8:14-16), and each input is coupled to a compensating circuit chip U12 which, in turn, is coupled to a switching chip MAX456SO, (9:28-38). There is no teaching or suggestion in Goolcharan of sending the generated video instruction to a switch, *the switch including a control logic component operatively coupled to a video crosspoint switch that is, in turn, coupled to the plurality of video inputs and the plurality of video outputs, and* connecting one or more of the video inputs to one or more of the video outputs according to the video switch instruction *using the video crosspoint switch* as recited in Applicant's claim 18 (emphasis added). Accordingly, claim 18 is allowable over Goolcharan.

Claims 19-24 depend from claim 18 and are allowable over Goolcharan at least due to their dependency on claim 18, and also due to additional limitations recited in those claims. For example, claim 22 recites the method of Claim 18, wherein sending the generated video instruction to a switch including a control logic component includes sending the generated video instruction *to a switch including a control logic component having: a local bus control logic component configured to receive and interpret control signals from the interface device; a command word buffer coupled to the local bus control logic component and configured to receive and buffer command words from the interface device, and local commands from the local bus control logic component; and a switch control state machine coupled to the command word buffer and configured to receive command words from the command word buffer and to condition the command words into an output signal suitable for input to the video crosspoint switch.* (emphasis added). These additional limitations are also not taught or fairly suggested by Goolcharan.

CONCLUSION

Applicant respectfully submits that pending claims 1-24 are now in condition for allowance. If there are any remaining matters that may be handled by telephone conference, the Examiner is kindly invited to telephone the undersigned at the telephone number listed below.

Respectfully Submitted,

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